THE HONORABLE JEFFREY W. RUNGE, M.D.
ADMINISTRATOR
NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION
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Mr. Chairman, Members of the Committee, thank you for asking me to appear before you to testify about the safety of sport utility vehicles (SUVs). I had the pleasure of testifying before the Committee last year about our agency's priorities and I appreciate the opportunity to describe how SUV safety fits into these priorities. I look forward to working with you as we seek to make our roads safer for all highway users.

I want to begin by giving you some data to set the safety context. In 2001, our data show that 42,116 people lost their lives in highway crashes and more than three million people were injured. The number of fatal injuries has been at about this level for the past several years. In view of the steady increase in travel, this means that the fatality rate is stable or declining slightly. The number of injuries was almost five percent lower than in the prior year – a significant decline. There is reason for hope in these numbers, and a sign that safety measures are having an effect. Highway travel on a vehicle mile basis is far safer than it was 20 years ago.

What's new about these statistics is that they reflect the experience of a vehicle fleet that is very different from the fleet of 20 years ago. A more complex fleet, including vehicles such as minivans and SUVs that scarcely existed before, has replaced the fleet that was once dominated by passenger cars. There are now over 79 million light trucks on the road – including pickups, minivans, and SUVs – representing about 36 percent of registered passenger vehicles in the United States. With light trucks now accounting for nearly 50 percent of new vehicle sales, their share of the total fleet is growing steadily.

While the overall fleet is safer, the new fleet composition presents new safety issues. Two issues stand out. Rollover is one issue. Pickups and SUVs are involved in a higher percentage of rollovers than passenger cars – the rate of fatal rollovers for pickups is twice that for passenger cars and the rate for SUVs is almost three times the passenger car rate. Overall, rollover affects about three percent of passenger vehicles involved in crashes but accounts for 32 percent of

passenger vehicle occupant fatalities. Single vehicle rollover crashes accounted for 8,400 fatalities in 2001. Rollover crashes involving more than one vehicle accounted for another 1,700 fatalities, bringing the total fatality count to more than 10,000.

Compatibility is the other issue. While light trucks represent 36 percent of all registered vehicles, they are already involved in about half of all fatal two-vehicle crashes with passenger cars. In these crashes, over 80 percent of the resulting fatalities are to occupants of the passenger cars. This problem will continue to grow as the percentage of light trucks in the fleet increases. SUVs account for about 35 percent of light truck sales.

These two issues are at the top of our vehicle safety agenda. I will address them in detail in a minute, but first I want to underline the importance of personal responsibility in highway safety.

We take a comprehensive approach to safety, which means that we look at the driver as well as the vehicle. We know that safety belt usage directly affects injury severity and the chances of survival in rollover crashes.

We can reduce the effects of the rollover problem overnight if all occupants will simply buckle their safety belts. The belts are there in every vehicle. They are 80 percent effective in preventing deaths in rollovers involving light trucks, and 74 percent effective in rollovers involving passenger cars. Yet 72 percent of the occupants of these vehicles who die in rollover crashes are not wearing safety belts. Of the fatally injured occupants, almost 60 percent are ejected from the vehicle, a percentage reflecting the violent and lethal nature of the rollover event.

We are intensifying our efforts to increase the level of safety belt use, through national safety belt mobilizations and by supporting the enactment of primary safety belt laws. Primary laws are more readily enforceable than secondary laws and lead to higher usage rates. Data show that the usage rate of safety belts in States with primary belt laws is 11 percentage points higher than the rate in other States. In 2002, the belt use rate reached 80 percent in primary belt law States for the first time. We will not solve the problem of low belt use unless the States adopt laws that can be readily enforced.

The other issue of driver responsibility is driving while impaired by alcohol or drugs. Impaired driving remains a constant problem on the highways. Alcohol is involved in 41 percent of the nation’s highway fatalities overall, and in a like percentage of fatal rollover crashes.

We believe the issues of the vehicle and the driver are inextricably linked. Many of the deaths and injuries that could be prevented through vehicle performance standards can also be prevented through measures to improve driver performance.

Our approach to SUV safety reflects this comprehensive view. We have made the issues I've mentioned – rollover, compatibility, seat belt use, and impaired driving – the focus of special teams, known as Integrated Project Teams, that bring together expertise from all parts of the agency. I asked the teams to look at the best data available on these issues and to identify action items that the agency should pursue. We will be incorporating the results of the teams' work into a coordinated strategy to address each problem, which we will publish in the Federal Register in the near future. Although my remarks today will focus mainly on the vehicle issues, I urge you to keep all four issues in mind as you consider the question of SUV safety.

Rollover

First, I want to address the issue of rollover. Under our consumer information authority, we carry out a program known as the New Car Assessment Program (NCAP). Through NCAP, we provide comprehensive information to aid consumers in their vehicle purchase decisions. The vehicle manufacturers have shown that they will voluntarily modify the design of their vehicles to improve their NCAP ratings. We welcome their efforts. Data shows that vehicles are becoming safer as a result.

We have used our consumer information authority to add a rollover resistance rating to NCAP beginning in model year 2001 that is based on estimates of the risk that a vehicle will roll over if it is involved in a single-vehicle crash. The rating is based on a vehicle's "static stability factor" or "SSF," which is a measure of a vehicle's track width (the distance between two wheels on the same axle) in proportion to the height of its center of gravity. Our analysis of real-world crashes shows that the ratings correlate very closely with the real-world rollover experience of vehicles. The lowest-rated vehicles (1-star) are at least 40 percent more likely to roll over than the highest-rated vehicles (5-stars).

A committee of the National Academy of Sciences recently studied our rating system for rollovers. While concluding that the static stability factor is an excellent predictor of single-vehicle rollover crashes, the committee stated that a dynamic rollover test might improve the rating system. The Transportation Recall Enhancement, Accountability, and Documentation (TREAD) Act directed us to develop such a test. We published a notice of proposed rulemaking under the TREAD Act last fall to prescribe a dynamic rollover test, received comments, and completed our own testing using the procedures in the proposal. We will publish a final rule in the near future. The dynamic rollover test will show how new vehicles actually perform in emergency steering maneuvers. Together, the static stability factor and the dynamic test will give manufacturers an incentive not only to improve the static stability of their vehicles but also to improve suspension systems and add stability control technology.

Informing consumers about voluntary improvements to rollover safety will help ensure that manufacturers who make such improvements are rewarded in the marketplace. The NCAP information will help consumers identify the vehicles that are more resistant to rollovers.

Market forces exert a powerful influence on vehicle choice, but consumers must be informed of the relative risks among vehicles in order to make appropriate market choices. Manufacturers will respond by providing vehicles that people want to buy. In areas in which consumer information enables consumers to discriminate among vehicles based on their safety, we will see the fleet change much faster than through the traditional regulatory approach. We have been trying our best all through this administration to find ways to ensure that consumers are informed about the differences among vehicles and the importance of becoming educated before making a vehicle purchase.

While market forces are relatively fast and efficient, the agency recognizes that certain changes can best be effected through the rulemaking process. NHTSA is accordingly working on four rulemaking initiatives to help reduce deaths and injuries when a rollover crash occurs. One is a proposed upgrade of door lock requirements. The proposed upgrade will be published this year. Second, we are completing our evaluation of the current roof crush standard and expect to propose an upgrade of that standard early in 2004. Third, the agency intends to pursue rulemaking to consider possible ways to prevent ejection out of windows during a rollover. Finally, we have asked vehicle manufacturers about their plans to voluntarily install more effective seat belt reminders. In addition, we are awaiting the report this summer by the National Academy of Sciences evaluating technologies to increase seat belt use.

In the meantime, since it takes time to establish credible, scientific performance standards, we are encouraging the manufacturers to take voluntary steps to make vehicles more resistant to rollovers and to incorporate technologies that will make vehicles more protective when rollovers occur. Last month I suggested to the industry that they work toward a consensus on rollover sensing technologies for these systems, and encouraged them to examine the use of technology to increase safety belt use, also an essential part of anti-ejection efforts.

Our rollover team is working on innovative ways of preventing rollovers and mitigating injuries associated with these crashes. The team is examining safety belts, roof-rail air bags, roof crush, tire safety, and other vehicle issues, as well as possible NCAP information on roof crush, tire safety, and vehicle handling. Next month we will be publishing information in the Federal Register that will reflect the work of this team.

New technology or regulations can both have unintended consequences. We will therefore proceed expeditiously but deliberately. The physician’s overriding ethic is “first, do no harm.” We want to avoid harmful effects such as might result if an

increase in roof strength resulted in raising the center of gravity, which could increase the propensity of a vehicle to roll over. We will continue to approach this holistically rather than through simple discreet, isolated rulemakings.

Compatibility

Now I'd like to turn to compatibility. In simple terms, compatibility is the degree to which vehicles are matched in vehicle-to-vehicle crashes. In the fleet of 20 years ago, the primary incompatibility was one of weight, involving large cars and small cars. However, the arrival of SUVs and increased numbers of pickups has made other incompatibilities important as well – incompatibility in vehicle height and in the alignment of interacting vehicle structures, such as bumpers and chassis frame rails. There are also differences in the stiffness and design of their structures and in style of construction -- vehicles with frames versus those with unibody construction.

These incompatibilities appear to be increasing. For example, in model year 1990 the average weight difference between light trucks and passenger cars was about 830 pounds. By model year 2001, the weight difference had increased to 1,130 pounds (based on EPA's Fuel Economy Trends Report). Similar changes are occurring in front-end heights and in stiffness. The average initial stiffness of pickups and SUVs is about twice that of passenger cars.

Passenger cars experience the greatest risk in frontal and side impact. For every driver fatality in a full-size van striking a car from the front, there are six driver fatalities in the passenger car. For every driver fatality in a full-size pickup, there are 6.2 driver fatalities in the car.

The problem is much worse for side crashes. The higher frame rails of a pickup truck or SUV may override the rails of a passenger car, resulting in greater intrusion. Likewise, the higher engine compartment poses a risk for passenger car occupants. When a pickup truck strikes the side of a passenger car, there are 26 fatalities among passenger car drivers for every driver fatality in the pickup. When a SUV strikes a passenger car, there are 16 driver fatalities in the passenger car for every driver fatality in the SUV.

Overall, these differences make SUVs and all light trucks more aggressive than passenger cars in their interaction with other vehicles. Based on our analysis, weight incompatibility and impact location each have a large effect on vehicle aggressivity. However, size and structure are also important. When controlling for impact location, and comparing light trucks to passenger cars of comparable weight, we found that light trucks were more than twice as likely as a car to cause a fatality when striking a car.

Some automobile manufacturers have voluntarily introduced changes to their SUVs that will lead to improved compatibility in crashes with automobiles. The

primary focus of these changes has been to improve the geometric mismatch between the frontal structures of the SUVs with those of the automobiles so as to improve the structural interaction during a crash.

NHTSA has a broad range of research activities currently underway on vehicle compatibility. Our immediate goal is to generate knowledge that government and industry alike can use. We are continuing to investigate real-world crashes, conducting crash testing, using computer modeling, and participating in international forums on vehicle compatibility. This information ultimately enables manufacturers to meet consumer's needs while producing vehicles that are less aggressive in a crash. This research also will provide the basis for future rulemakings.

We have also stepped up research related to side crash protection and research to evaluate the potential of advanced inflatable safety systems for preventing ejections in rollovers and protecting occupants in side impact crashes.

In August 2002, we published for public comment a 4-year vehicle safety rulemaking priority plan. Rollover and compatibility were identified in the draft plan along with many other safety issues. In addition to considering public comment submitted in response to the plan, we are currently examining the research support that will be needed to implement those rules.

We also have an agency-wide Integrated Project Team (IPT) addressing this issue. The Compatibility Team currently is evaluating both aggressiveness and incompatibility in multi-vehicle crashes, both through real-world statistics and crash test data, to try to identify causation factors and solutions that can be incorporated into the vehicle fleet over time. This problem is being approached in two ways: by looking at measures to improve the safety features of the struck vehicle and measures to reduce the aggressiveness of the striking vehicle. The strategies they recommend will be published in the Federal Register this spring.

Fuel Economy

Just as important to our work regarding the rollover propensity and compatibility of future vehicles is our ongoing work to address concerns about the relationship of corporate average fuel economy (CAFE) standards to safety. As you know, the President's National Energy Plan emphasized our strong determination to take safety into account when setting fuel economy standards.

We take seriously the findings and recommendations of the congressionally mandated study by the National Academy of Sciences (NAS) concerning the effect CAFE has had on vehicle safety. The NAS report concluded that the current CAFE system has had an unintended negative effect on passenger safety. It has in the past encouraged the divergence between small and large vehicles in the vehicle fleet, which has led to increased passenger fatalities and

injuries. The NAS found that CAFE standards contributed to both the sale and production of lighter and smaller cars to meet the standard and the displacement of large passenger cars by minivans and SUVs in the nation's vehicle fleet, with negative consequences for vehicle safety. We are completing a comprehensive evaluation of the effects of the changes in vehicle weight and safety that have occurred in the years since the CAFE standards went into effect.

The President urged Congress to lift a six-year freeze on setting new CAFE standards, and we were pleased when it did so in December 2001. Since then, our agency has been hard at work setting sound, science-based light truck fuel economy standards for model years 2005 through 2007, which we will issue by April 1. Our proposed increases are the highest in 20 years and can be implemented without compromising safety or employment.

This spring, NHTSA will also publish an Advance Notice of Proposed Rulemaking to ask for comments about fuel economy standards beyond model year 2007. Many new fuel-saving technologies are on the point of being introduced. We want to find ways to improve fuel economy significantly while protecting passenger safety and jobs.

We know that, to a significant degree, the CAFE program and our past rules defining light trucks have contributed to the problems we now seek to solve. We will be asking how we might restructure the CAFE program under the current statutory authority to solve these safety problems. We are asking Congress to make safety and employment explicit statutory criteria for future CAFE rulemakings. And we will ask Congress for statutory authority to reform the CAFE system, perhaps along the lines recommended by the NAS, if we conclude that is the most appropriate way to improve fuel economy while protecting passenger safety and jobs. We expect that our evaluation of vehicle weight and safety will be considered in this rulemaking proceeding.

Conclusion

We are committed to reducing the problems of rollover and incompatibility. But NHTSA cannot do this successfully by itself. The manufacturers are fully aware of our concerns, and many have committed to address these problems. We are gratified by the recent response to our call for action from the automotive industry. The Alliance of Auto Manufacturers convened a meeting this month of the world's experts in compatibility, which was led by the Insurance Institute for Highway Safety. I received a letter on February 13 from the Alliance and the Insurance Institute stating their commitment to working on the issue. This is imperative.

We will be looking closely at the data from industry's forthcoming research as well as our own to make vehicles more compatible and to help individuals in the struck vehicles survive and avoid serious injury. The Alliance informed us last

week that they intend to use the same approach to an industry-wide initiative to address rollover. This is good news for their customers and for all Americans who depend on them for safe, reliable, and comfortable transportation.

Mr. Chairman, this concludes my overview of the safety of SUVs. The issues involved are challenging, but I believe that we are meeting the challenge and that our actions will improve safety on the nation's highways. I will be glad to answer any questions you may have.